

# CIVILIZATION AND URBANISM, RISE OF

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## Glossary

**urbanism** The study of cities – their economic, political, social and cultural environment, and the imprint of all these forces on the built environment.

**city** A center of population, commerce, and culture; a town of significant size and importance.

**state** A regional polity characterized by social stratification and centralized and specialized administration.

When the archaeologist V. Gordon Childe coined the term ‘urban revolution’, he posed a central question for archaeology: what is the relationship between the development of the earliest cities and states? The emergence of the first cities entailed an historical and evolutionary transformation in human social relations and the landscapes where these developments first took place: Mesopotamia, Egypt, the Indus Valley, China, Mesoamerica, and South America (Figure 1).

The first cities did not necessarily develop gradually; some early centers grew explosively as regional populations relocated to them. Most early cities formed in a network of interacting peer polities and

nowhere was this transformation entirely peaceful (or entirely coercive). Differences in the size, form, and organization of early urban centers have prompted discussion regarding whether there were early civilizations without cities or whether cities developed in the absence of states, what the appropriate definition of a city is, and why some early civilizations were more urban than others. There is a developmental trajectory in ancient urbanism, with some state institutions evolving over time that were not present in the first cities.

Archaeologists have moved away from definitions based strictly on absolute size and density criteria to typological approaches that relate variations in form to the development of social institutions and/or functional approaches that emphasize the role of cities relative to their hinterlands. It has not proved to be especially useful to focus on notions of cities as sharply demarcated, autonomous, corporate communities. Cities were embedded in larger societies and cannot be understood apart from that wider frame. People in early civilizations did not always draw as sharp a distinction between city and countryside – often the important social entity was the political territory controlled by a ruler.

Early cities were centers of population and contrasted with less densely occupied hinterlands. Elites concentrated in early cities that were centers for the production and distribution of wealth and political and ritual activities. All early states had such centers



**Figure 1** Schematic world map showing regions with early cities.

where the social transformations of state formation – innovations in forms of governance, social institutions, and ideological programs – were materialized. The form of early cities ranged from the dispersed centers of the Classic Maya to the compact, walled cities of Mesopotamia. Early cities of the Old World usually were walled, a characteristic often attributed to military tactics, although land values might have been an influencing factor.

Some archaeologists feel that distinguishing between networks of small states, each comprised of a capital town/city and hinterland, and large regional/territorial states explains much variation in early cities and urbanism. Generally, territorial states were less urbanized than city-state systems, although not all small polities were very urbanized. Large states did not always have very urbanized capitals. Many archaeologists emphasize economic factors and the role of markets and merchants in the growth of large cities and urbanism. Contrary to early views of preindustrial cities, certain early cities exhibited considerable economic differentiation and commercial development. Other researchers focus on the role of technology, especially transportation technology, and ecology in accounting for urban size differences.

Politics and rural–urban relations also shaped the form and size of early cities. Rulers of large territorial states frequently moved between multiple capitals and sometimes shifted locations of capitals. Their capitals were often dispersed, which archaeologist Bruce Trigger attributes to the absence of threats of external attack. The cities of Classic Lowland Maya kingdoms, however, were dispersed also, despite regular conflicts between them. The absence of a single urban nucleus might reflect weak central political authority or multiple hierarchies.

Rulers of large states had to delegate authority to people outside the capital, thus creating a hierarchy of administrative centers; in the case of imperial colonies, urbanism sometimes was imposed. Colonial centers were not always well integrated with the countryside and their persistence or collapse was closely linked with the fortunes of the imperial state. Some city-states and their urban centers also expanded through conquest to form empires or hegemonic states, although they often were short-lived.

As political capitals, the earliest cities often symbolized the state or kingdom and stood at its cosmological center. Monumental architecture was a prominent feature of most early cities because conspicuous consumption was an important strategy of early rulers and elites. Palaces served as both residences and administrative headquarters. Temples and shrines to deities and the cosmic forces of the universe towered over the

urban landscape. Where cults of kings developed, funerary monuments were built in cities to honor ancestral rulers. Where states emphasized corporate strategies, depictions of rulers were rare.

Because of the presence of impressive monumental architecture, often sites of state religious rituals, the symbolic dimension of early cities has long attracted attention. Although the notion that the earliest cities were primarily religious centers is mistaken, how ideology was incorporated into the urban landscape as a built environment remains a current topic. Were cities by-products of technological and sociopolitical changes or were they created? Rather than viewing cities as a passive backdrop for expressions of power, some scholars advocate the view that cities were built and maintained to legitimize and constitute authority. In some world regions, cities or sacred precincts in them were deliberately designed to represent aspects of cosmology.

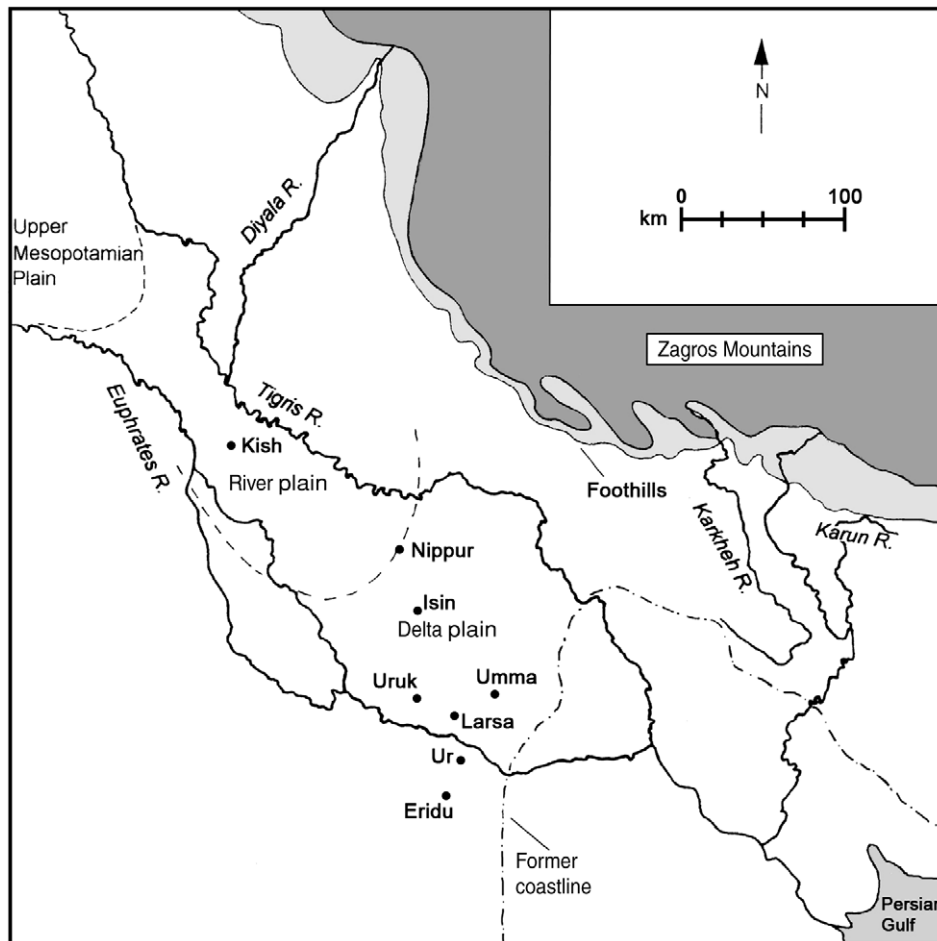
Another recent research direction examines the social composition of cities and household and neighborhood organization. Many early city dwellers were commoners, and in certain regions, such as Mesoamerica, substantial numbers of farmers lived in the earliest cities for political and defensive reasons. People of the highest status tended to live in the central part of cities; however, neighborhoods often included a mix of high- and low-status households. Such residential divisions, the physical separation of administrative, religious, and market centers, and dispersion of manufacturing areas, seen especially in city-state centers, reflect the internal divisions of early states.

A regional perspective directs attention to hinterlands and urban–rural relations. In addition to supplying food, raw materials, and goods, cities depended on rural villages for labor and immigrants. Immigration fueled the rapid growth of the earliest cities and helped sustain them thereafter. The possibility that crowding, poor sanitation, and inadequate diets caused mortality rates to exceed fertility rates has been raised by a few studies but this important issue warrants more systematic study.

The archaeology of the earliest cities faces particular challenges because later settlement often overlies the early ruins or they have been destroyed by human activities or environmental changes. As described below, there is considerable diversity in the earliest urban forms that reflects diversity in the organization of the earliest states themselves.

## Sumer

The land of Sumer – southern Mesopotamia from south of Baghdad to the marshlands at the head of



**Figure 2** The southern tip of the Mesopotamian plains with the approximate shore of the Persian Gulf and the location of important sites mentioned in the text. After Susan Pollock, 1999. *Ancient Mesopotamia*. Cambridge: Cambridge University Press, figure 2.1, with some modifications.

the Persian Gulf – has been called the ‘heartland of cities’ (Figure 2). Here we find ample evidence for two major developments in human history: the beginnings of urban life and the formation of the first states. Many theories on these landmark developments rely on archaeological data from this region. Although these theories may debate the causes, mechanisms, and relationships between urbanism and state formation, they agree that cities and states developed in the context of a rich agricultural regime dependent on the fertile alluvial plains created by the Tigris and Euphrates rivers.

The earliest phases of settled life in Mesopotamia began farther north and it was not until the early sixth millennium BC, with the emergence of the ‘Ubaid culture, that villages and small towns appeared in Sumer. Archaeological evidence from ‘Ubaid settlements suggests a gradual change toward increasing socioeconomic complexity. However, as town dwelling in Sumer was undergoing its organic development,

some evidence suggests that the shift to urbanism involved the introduction of a new form of settlement, the ‘city-state’, that came to characterize Sumer later in the Early Dynastic period (c. 2900–2334 BC). Each city-state consisted of an urban center exercising control over a hinterland of a 15–20 km radius, dotted with smaller settlements engaged in the production and collection of foodstuffs. An underlying feature of each urban center was the Sumerian concept that each was the dwelling of a particular god or goddess, the patron deity of the city (and the state) whose temple formed the city’s focal point. Cities and states emerged from these temple-based settlements, the first example of which can perhaps be witnessed at Eridu.

### Eridu

According to Sumerian literature, Eridu was the first city to receive kingship from the gods in antediluvial times. Eridu was the site of é-bazu, the temple of Enki, the supreme deity of the Sumerian pantheon

and god of subterranean freshwater. Construction of a modest mudbrick building at Eridu at the southernmost edge of the alluvial plain during the early 'Ubaid period marks an important landmark in human history. This building – interpreted as a shrine – is superimposed by foundations of 15 increasingly larger structures, and finally by a ziggurat for Enki built by kings of the Third Dynasty of Ur some 3500 years later. The superimposition of the buildings, from the modest examples of earlier levels to the elaborate examples of upper levels to the Ziggurat of Enki, stressed the sanctity of this location.

Little is known about the settlement surrounding these early shrines, but the largest recorded 'Ubaid cemetery was discovered here, with an estimated 800–1000 graves showing evidence for social differentiation.

### Uruk

The pattern observed at Eridu may have been repeated at other sites. For example, the city of Uruk was also founded during the 'Ubaid period. Beneath the temple precinct of the goddess Inanna (called Eanna, 'house of heaven'), deep soundings have reached buildings that may have been cultic structures similar to those at Eridu.

At this time, the head of the Persian Gulf was about 80 km northwest of its present location with the Tigris and Euphrates Rivers each forming its own delta. This turned the area around Uruk into a well-watered, alluvial, and marshy land that allowed a rich agricultural regime to flourish.

By the end of the 'Ubaid period, Uruk was a town of modest size, but it grew gradually throughout the following Uruk period (traditionally associated by archaeologists with state formation), experiencing a surge from the Middle Uruk to Jemdet Nasr periods (3600–2900 BC), and reaching 400 ha by the Early Dynastic II period (*c.* 2700 BC). Surveys of the Uruk countryside suggest that there was a continuous migration of people into the city, leading to the abandonment of many smaller settlements. Middle Uruk period settlement patterns indicate a four-level administrative hierarchy for the region, interpreted by archaeologists as a marker of a state system.

Excavated evidence from the city also suggests state institutions. In the Eanna precinct, a series of monumental buildings were discovered, but most date to later phases of the Uruk period. The so-called Limestone Temple, Stone Building, and Stone Cone Temple, all with foundations made from limestone slabs quarried from the Arabian Shelf some 80 km east of the city, date to the Uruk V period (*c.* 3600 BC) when, presumably, a state was already in place.

In the next phase (Uruk IV), several other monumental buildings were constructed around the Great Court, including Buildings A–E, Hall of Pillars, Hall of Round Pillars, and the Subterranean Building made from 'riemchen' (a kind of small brick with a square cross section). In the Uruk IV period, the appearance of the earliest protocuneiform numerical tablets, apparently used to record economic transactions, is also observed.

In the Late Uruk period, a mudbrick wall was constructed around the city that was rebuilt on a larger scale in the Early Dynastic I period (*c.* 2900 BC). Sumerian texts attribute this undertaking to Gilgamesh, the semi-mythical ruler of Uruk. To archaeologists, the construction of a wall signals the rise of other competing polities.

By the Early Dynastic II period (*c.* 2750–2600 BC), the land of Sumer was divided among as many as 35 city-states. Some, including Lagash, Umma, Ur, Isin, Shuruppak, and Adab, played a more important political or military role. Two lines of evidence indicate the consolidation of states in this time: royal titles indicating established kingship, and buildings interpreted as palaces. The most solid evidence for both comes from the quintessential Sumerian city, Kish.

### Kish

The city of Kish in the northernmost part of Sumer was also founded during the 'Ubaid period. Kish expanded and attained prominence in the Early Dynastic period, when it was considered to be where the kingship descended from heaven after the Great Flood. The prestigious title 'King of Kish' signified, at least nominally, political hegemony over the land of Sumer. The authority of the king of Kish derived from military might as well as a coalition among several city-states, evidence for which comes from seal impressions from Ur and Jemdet Nasr.

Excavations at Kish are more limited than at Eridu or Uruk, but the first example of a Mesopotamian palace was discovered here in Area A. To the northwest of this palace (in Area P), a large building with extensive storage facilities and thick buttressed walls may have been another palace or a heavily fortified administrative building. Also in the Early Dynastic period, at least two structures were built at Kish that have been interpreted as ziggurats, perhaps dedicated to Zababa, the important god of Kish.

With the rise of Sargon of Agade, Sumerian city-states lost their autonomy and were absorbed into the Akkadian Empire. Some attempts were later made to revive the city-state form of government, for example, during the Isin–Larsa period (2017–1763 BC), but the

nature of Mesopotamian government had already shifted from city-states to polities oriented toward inter-regional hegemony.

## Egypt

Egypt has been called ‘the civilization without cities’. While the lack of evidence for major urban centers with domestic residential quarters dating to the earlier part of Egyptian history may partially be due to heavy sedimentation or later human activities, one should not ignore the fact that large cities would hardly have had enough room to flourish in the tight Nile Valley (Figure 3).

From the beginning of sedentism in the Nile Valley up to the unification of Upper and Lower Egypt and the foundation of the Egyptian state (c. 4500–3100 BC), one can distinguish three broad patterns of settlement development:

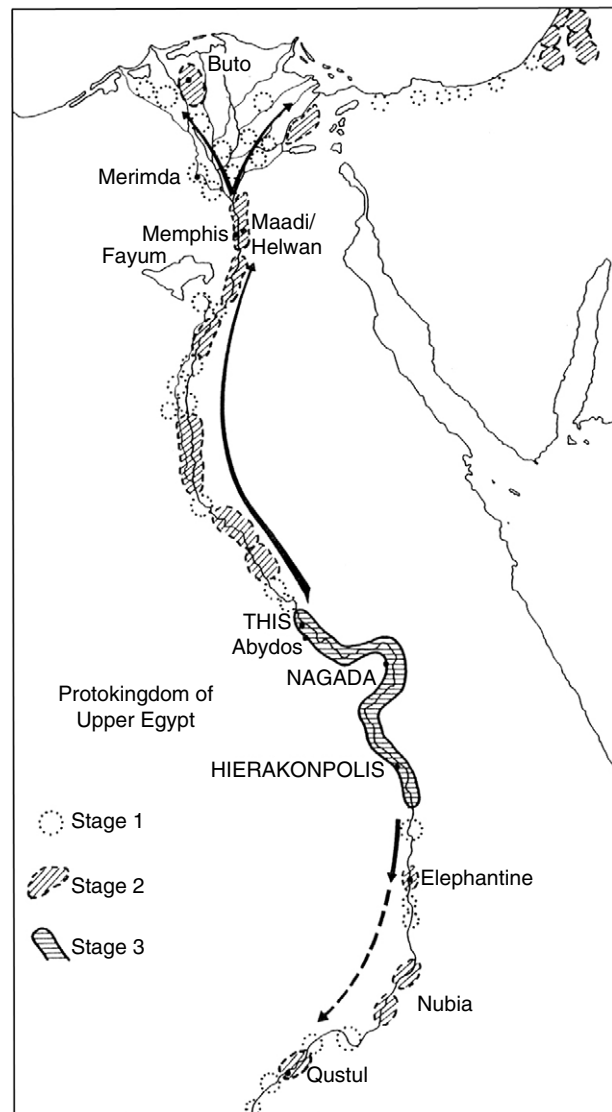
*Phase 1 – Tasian–Badarian period (c. 4500–3900 BC).* Small, more or less self-sufficient farming communities were located on the margins of the floodplain, levees, and the low desert to avoid annual flooding, but to have easy access to rich alluvium left behind by the Nile.

*Phase 2 – Amratian or Naqada I period (c. 3900–3500 BC).* Small towns, perhaps centers for craft activities, involved in regional exchange, were located along the edge of the floodplain and on the levees. These towns were usually associated with cemeteries that began to exhibit signs of social differentiation.

*Phase 3 – Gerzean or Naqada II period (c. 3500–3200 BC).* Small cities that housed protokingsdoms exercised control over a stretch of the floodplain and towns and villages within it. The Egyptian state seems to have emerged in Naqada III or protodynastic period (c. 3200–3000 BC) within the context of competition and coalition among three major protokingsdoms in the Upper Egypt: This, Naqada, and Hierakonpolis.

## This

This or Thinis (ancient Abedjo) is actually famous for its funerary satellite site Abydos. Abydos may have started out as a burial ground on the outskirts of the city of This, but a large number of protodynastic burials, not to mention the main burial ground for the kings of the first and second dynasty, turned Abydos into the most prominent necropolis in Egypt, already signifying its later importance as the main cult center of the god Osiris, the primary god of the land of the dead.



**Figure 3** The protokingsdoms of Upper Egypt in protodynastic period, with the location of sites mentioned in the text. After Barry J. Kemp (1989). *Ancient Egypt: Anatomy of a Civilization*. London: Routledge, figure 13.

## Naqada

In the protodynastic period, the South Town at Naqada (ancient Nubt) housed a large mudbrick enclosure, perhaps a royal compound, some 50 m long and 34 m wide with walls 2 m thick. At the Naqada cemetery, one can also see increasing evidence for social differentiation in larger, better constructed, and more lavishly furnished tombs. One particular example is Tomb T5, where an individual was found accompanied with remains of human sacrifice.

## Hierakonpolis

The city of Hierakonpolis (ancient Nekhen), perhaps the most important protodynastic center in Upper

Egypt, consists of two zones: the low mound located in the floodplain where the remains of the town and the Temple Mound are found, and a group of inter-related sites stretching westward for 2 km into the Western Desert. Excavations at the Temple Mound have exposed traces of an early shrine – perhaps dedicated to Horus, the god of Hierakonpolis – in which the famous Main Deposit was discovered, including some of the most important artifacts pertaining to the era of state formation, such as the King Scorpion macehead and the Narmer Palette. To the north of the Temple Mound, remains of a monumental building have been excavated, featuring a 20 m wide gate built with mudbrick in the distinct niche-and-buttress style reminiscent of Uruk period Mesopotamian masonry.

Excavations at the Hierakonpolis cemetery indicate an accelerated process of social differentiation from late predynastic to protodynastic period, as one can see a marked difference in the size and contents of the burials. One remarkable burial is Tomb 100, where the walls are decorated with colorful painting combining Egyptian and Near Eastern motifs.

As urbanism and political developments were underway in Upper Egypt, a number of cities flourished in Lower Egypt, most importantly Buto.

### **Buto**

Founded in the mid-fourth millennium BC on a sand dune about 30 km south of the Mediterranean coast in marshlands of northwestern delta, Buto soon became an important town engaged in exchange networks of the eastern Mediterranean, evident in pottery finds from the Levant and Syria and the so-called ‘clay-cones’ reminiscent of Uruk Mesopotamia.

By the Naqada II period, people from Upper Egypt began expanding northward into Lower Egypt. While this movement may have initially been a peaceful process to allow people of Upper Egypt more direct access to the eastern Mediterranean and its resources, archaeological and iconographic evidence suggests that the political unification of Upper and Lower Egypt was achieved through military campaigns waged by several generations of Upper Egyptian rulers culminating in a Thinite ruler called Narmer.

According to Manetho, the third century BC high priest at Heliopolis who composed a history of Egypt, the legendary first pharaoh of Egypt, Menes (who may or may not be the same person as Narmer), founded a city at the juncture of Upper and Lower Egypt to serve as the capital of the unified kingdom. This city came to be called *inbu-hedj* (‘white walls’) in Egyptian and Memphis in Greek.

### **Memphis**

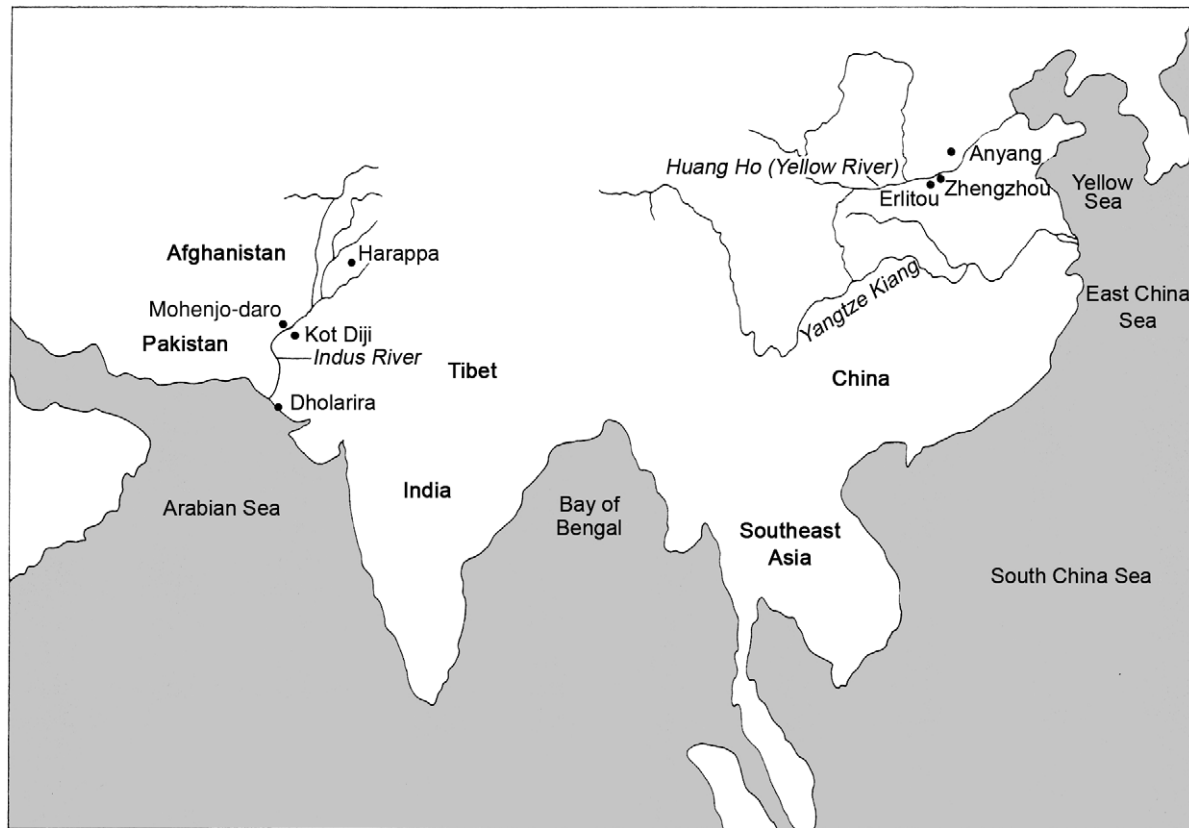
The ruins of Memphis, about 20 km south of Cairo, occupy an area of *c.* 4 km from north to south and 1.5 km from east to west. Despite sustained archaeological fieldwork since the nineteenth century, no settlement remains earlier than the First Intermediate period have been discovered, mostly due to heavy overburden of later periods. The city of Memphis is important for a number of monuments, including the Temple of Ptah that may have begun in Early Dynastic period, although nothing earlier than Nineteenth Dynasty has been discovered so far. The area around Memphis is, however, dotted with remains of Early Dynastic and Old Kingdom times: to the south is Saqqara where mastabas of the Early Dynastic officials and the Step Pyramid of Djoser are located, and to the north Giza where the pyramid complexes of the Fourth Dynasty pharaohs Khufu, Khafra, and Menkaura are to be found.

As the capital of Egypt during Early Dynastic and Old Kingdom times (*c.* 3000–2165 BC), Memphis was the most important political and cultural center in the land. The temple of the sun god Ra’ at Heliopolis to the northeast of Memphis was an important religious center with strong influence on Old Kingdom royal ideology, gradually replacing Horus with Ra’ as the primary deity associated with the pharaoh. Memphis also produced one of the more important Egyptian myths of creation revolving around Ptah. Ateliers working out of Memphis under the patronage of the royal court were responsible for creating splendid works of art and architecture that characterize the distinct Old Kingdom style, highly regarded and emulated in later phases of Egyptian history. However, despite its political and cultural importance, Memphis was basically a royal city where the court and high officials resided, while the population continued to live in small towns and villages along the Nile.

With the decline of the Old Kingdom and disintegration of the central government, Memphis ceased to be the capital and two other cities laid claim to power: Herakleopolis in Middle Egypt where the Ninth and Tenth Dynasties ruled and Thebes in Upper Egypt where Eleventh and subsequently Twelfth Dynasty pharaohs embarked on another series of campaigns to reunify Egypt and establish the Middle Kingdom.

### **Indus**

The early Indus civilization covered a vast area of 500 000 km<sup>2</sup> and extended well beyond the Indus River basin to parts of Afghanistan in the north and to Gujarat in the south to the Indo-Gangetic divide in



**Figure 4** Schematic map showing locations of early cities in the Indus Valley and China.

the east and the Makran coast in the west (Figure 4). The early cities of the Harappan phase of the Indus Valley Tradition of Pakistan and western India developed by 2600 BC and lasted as late as 1300 BC in some areas. The region was not politically unified and the degree of integration of Harappan centers is debated. At least five centers were large enough to be considered cities: Harappa, Mohenjo-daro, Dholavira, Ganweriwala, and Rakhigarhi, each with a hinterland of 100 000–150 000 km<sup>2</sup>. All Indus cities shared some common features: walled settlements, urban planning of streets and buildings, sophisticated drainage systems, a common writing system and system of weights, and similar styles of pottery and other goods (*see Asia, South: Indus Civilization*).

The nature of urban–rural integration is not well understood. Some archaeologists have even questioned whether early Indus polities were states because of an absence of monumental religious architecture, palaces, and depictions of rulers and limited evidence of warfare. The Great Bath at Mohenjo-daro indicates that ritual bathing has a long religious tradition in the region. The lack of glorification of rulers is not unique among early civilizations and suggests a corporate form of rulership. The absence of recognized archaeological evidence of warfare does not

necessarily indicate an absence of warfare, as the history of research on Classic Maya civilization demonstrates. The size, complexity, and urban planning of Indus cities are consistent with the state form of organization.

The Indus script is yet to be deciphered. Recent archaeological investigations, however, have provided new details of Indus cities and also corrected misconceptions from their initial discovery in the 1920s.

### Harappa

The city of Harappa was first settled around 3300 BC and expanded to cover at least 150 ha. The urban population ranged from 40 000 to 80 000 persons, depending on the time of year. Four mounded areas were clustered around a central depression that might have held water. The mounded areas were walled, as was the entire city, and entered by gateways. Because of poor preservation, it is difficult to determine the layout of houses and the function of buildings. Workshops occur along with residences in each of the mounded areas. Various functions for the walls have been suggested: defense, flood control, and the demarcation of sociopolitical boundaries. Workshops



and multistory residences built of kiln-fired bricks occur in all the mounded areas, suggesting that the walls may represent political and/or social divisions, along with defensive aspects. The city was laid out to separate public and private areas.

Indus cities had sophisticated water- and waste-management systems. Wells for drinking water occurred in and around Harappa. Houses had bathing areas, latrines, and sewers that connected to larger drains that emptied beyond the city walls. The fertile waste water was deposited on agricultural fields surrounding the city.

### Mohenjo-daro

Mohenjo-daro, located on the lower Indus, is the best-preserved Indus city. It covers 200 ha. The walled citadel mound includes several large buildings that might include elite residences, along with the famous Great Bath. A lower town covering 8 ha is divided by four major east–west and north–south streets that divide into blocks that are further subdivided by smaller streets and alleyways. Houses are grouped around courtyards and included bathrooms and elaborate drainage systems. Workshops where various types of commodities were produced are distributed throughout the city.

### Dholavira

Dholavira is the most recently discovered Harappan city. It is located on Kadir Island in the Gulf of Kutch and was founded as an outpost or colony. The mix of artifact styles suggests that along with the local population, Indus Valley elites and artisans lived in the city. Dholavira had a very different layout than the better-known cities of Mohenjo-daro and Harappa. The outer city wall enclosed a series of walled rectangular and square compounds. Residential and craft areas occurred in the lower or outer town that is divided by streets running in cardinal directions. Large structures were present on the acropolis.

Little excavation has been undertaken at either Rakhigarhi or Ganweriwala, two cities identified through survey. Much work remains to be done to understand early Indus cities more thoroughly. The cities were connected through trade networks. They imported raw materials and finished goods from Central Asia and Afghanistan, and carnelian beads and shell bangles made in Indus cities have been found in Mesopotamia and Central Asia.

Around 1900 BC, the cities began to lose population, and other defining characteristics of early Indus civilization such as its system of weights were no longer practiced. Foreign invasions, natural disasters,

and disruption of trade networks with southwest Asia used to be the conventional explanations, but archaeologists now favor an interaction of factors that might have disrupted trade networks and undermined the power of elites, but the details remain unclear.

## China

Chinese urbanism developed out of Neolithic and Chalcolithic patterns of site layout (Figure 4). Over several millennia, village sites began to exhibit specialized architecture, distinguishable residential clusters, and the construction of defensive ditches. By Longshan times (*c.* 2600–2000 BC), square or rectangular precincts with nucleated populations were enclosed by walls of rammed earth (*hangtu*), which are thought to have housed and protected an emerging elite. Walled sites from the Longshan period include Wangchenggang, Dantu, Bianxianwang, Pingliangtai, Shijiahe-Tucheng, and Laohushan. The walls of these sites enclose a modest area (generally less than 10 ha), and although residential areas are known outside of the walls, it is probably inaccurate to consider such sites to be the urban capitals of early states. (In comparison, the average city size for Eastern Zhou capitals (770–221 BC) has been estimated to be about 16 km<sup>2</sup>.) Recent archaeological surveys indicate the establishment of multitier settlement hierarchies during Longshan times, with some very large sites developing. Despite large settlement sizes, clear archaeological indications of centralized states do not appear to be present during the third millennium BC.

Longshan period developments culminated in the emergence of a suite of new artifactual and architectural forms known as the Erlitou culture (that many researchers using texts link to the Xia Dynasty). Erlitou is a sizeable settlement that has foundations of what is interpreted as a palace, as well as several craft workshops. Although no wall has been found at this site, rammed-earth foundations have been identified, the largest of which were surrounded by an enclosure wall and held large halls in which rituals were conducted. In its later phases, the Erlitou site is thought to have developed into the urban capital of a centralized state.

### Zhengzhou

Clear archaeological and textual evidence for urban settlements with populations numbering at least in the thousands is more readily available from the mid-second millennium BC. Shang period sites of the Central Plain (Zhongyuan region) in North China. The Middle Shang (*c.* 1600 BC) city of Zhengzhou consists of a walled area surrounded by areas of craft



production, and is thought to have been the capital of a Shang state. The walled sector of the city enclosed an area of nearly 3 km<sup>2</sup>, within which are a number of rammed-earth platforms that may have held elite residences. While the walled part of the city is considered to have housed an elite population, craft production areas have been identified outside the walls, including bronze smelting, bone ornament and tool production, and pottery production. Cemeteries are also found outside the walled city.

A number of smaller cities appear to have developed around the same time as Zhengzhou, including Panlongcheng and Shixianggou. The latter site has a walled precinct laid out with wide avenues and has a large palace enclosure that occupies about 4 ha.

### Anyang

The later Shang capitals at Anyang and Shangqiu are better known archaeologically. Anyang is thought to have been the sixth and final capital of the Shang dynasty. By around 1200 BC, the city comprised a metropolitan area of some 15 km<sup>2</sup>, consisting of multiple occupation clusters spread along a 6 km stretch of the Yellow River. Anyang was not merely a conglomeration of villages – large-scale residential foundations thought to be palaces have been found at Xiaotun, and tombs of a scale indicative of royal burial are present at Xibeigang, where a large number of inscribed oracle bones attest to a qualitative change in social organization. Three clusters of hangtu foundations have been identified at Xiaotun, a total of 53 individual foundations of which the largest is 2800 m<sup>2</sup>. Storage pits containing the remains of grain, bronze weapons, oracle bones, and fine pottery have been identified around the palatial foundations. Craft workshops and commoner residences are also present, indicating that bronze casting and jade, shell, bone, and stone working were conducted in the area around the palaces. The Xiaotun sector is thought to be the administrative-ceremonial core of Anyang, administering a web of surrounding settlement clusters.

One of the outlying sites that constitute the Anyang urban web is Xibeigang, where 13 monumental tombs have been excavated. All of these consist of a primary pit accessed by ramps that share the same orientation and have evidence of extensive sacrificial burials (including humans, dogs, horses, and other animals) associated with the burials of prominent individuals. Although these have been extensively looted, the Fu Hao tomb excavated at Xiaotun offers us a sense of the wealth of grave goods placed with prominent individuals. This tomb belonged to a wife of the ruler Wu Ting and contained 16 human sacrificial victims,

six dogs, 7000 cowrie shells, and more than 1600 other items (bronzes, jades, oracle bones, stone objects, ivory carvings, pottery, and shell objects).

More research is needed to clarify patterns of urban development in China, but it is clear that cities with populations exceeding 100 000 had developed by Eastern Zhou times (771–221 BC), when urban settlements exhibit a more nucleated character and a more consistent layout. By this time, the urban form included a walled inner city (*wangcheng*) that contained a palace, an outer city (*guo*), and a surrounding hinterland of suburbs (*jiao*) and farming hamlets (*ye*). Zhou cities were commercial centers with thriving craft industries and well-developed administrative hierarchies.

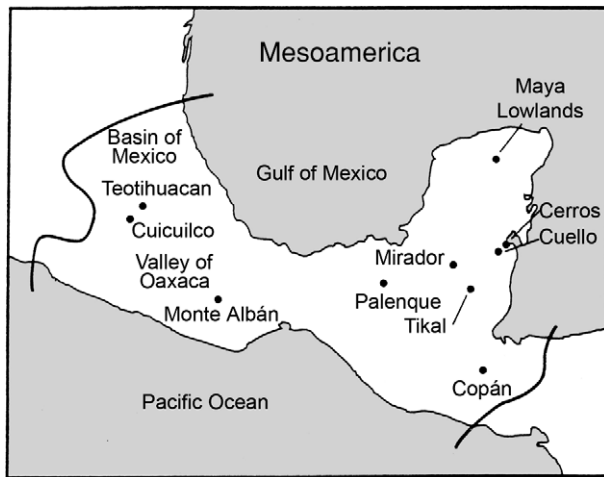
It is undeniable that these cities developed out of millennia-long traditions of settlement organization. Longshan social development saw the appearance of walled compounds of a few hectares, possibly areas of elite residence and craft production that were surrounded by commoner settlement. By the mid-second millennium BC, China's largest sites covered several square kilometers and had sizeable precincts (sometimes walled) in which monumental architecture, palatial residences, ritual spaces, and storage facilities were located. Craft production appears to have become more specialized and was carried out on a larger scale in workshops outside of the inner city. Farmers lived in rural communities outside of the cities. It appears that the inner parts of these early cities were planned to a degree not seen at the urban periphery, which grew more organically in a number of linked settlement clusters.

### Mesoamerica

By the early sixteenth century, when the Aztec capital of Tenochtitlan was among the largest cities in the world, Mesoamerica's urban tradition was over 2000 years old (Figure 5). Prehispanic cities took different forms and varied significantly in size. Most archaeologists place the beginnings of urban life and development of state organization during the Late or Terminal Formative/Preclassic with the formation of civilizations in both the highlands and lowlands.

### Teotihuacan

By the end of the Late Formative at 300 BC or slightly thereafter during the Early Terminal Formative (300–100 BC), two urban regional centers dominated the Basin of Mexico in the central highlands – Cuicuilco in the southwest and Teotihuacan in the northeast – each head of a state system. About 100 BC, Teotihuacan grew explosively as most of the



**Figure 5** Schematic map of Mesoamerica showing locations of early cities.

basin's population relocated to the city. Volcanic eruptions destroyed Cuicuilco and its immediate hinterlands leaving Teotihuacan as the sole power in the basin until CE 650/750. It became the most influential city in Classic period Mesoamerica.

The city expanded to 100 000–125 000 people and covered 20 km<sup>2</sup> by CE 300. In prehispanic Mesoamerica, only Tenochtitlan in the early fifteenth century was larger. Following the aggregation of the basin's population at Teotihuacan, its rulers undertook a massive reorganization of the city structured around a cruciform plan. Monumental buildings were constructed along a main north–south artery (Figure 6). A one-story apartment compound became the standard residential unit that housed related families, each with their own apartment.

Although many farmers lived at Teotihuacan, craft specialization expanded as the city became a major commercial center. Teotihuacan was a primate city whose size, military, politicoeconomic, and ideological importance inhibited the development of rival centers. By the mid-500s, however, the city had increasing economic and political difficulties in its hinterlands, and around CE 650 or 750 major temples and other public buildings at Teotihuacan were burned and figures smashed. The collapse of Teotihuacan marked the start of the Postclassic city-state systems, and, although greatly reduced in size and influence, Teotihuacan became an Epiclassic (CE 650–950) city-state center.

### Monte Albán

In the Valley of Oaxaca in the southern highlands of Mexico, the city of Monte Albán became the political and cultural center of the early Zapotec state. Toward



**Figure 6** Teotihuacan looking down the Street of the Dead.

the end of the Middle Formative (about 500 BC), Monte Albán was founded for defensive and ideological reasons atop a cluster of hills in the center of the valley. To some archaeologists, the establishment of Monte Albán signals the political unification of the valley and beginnings of state organization. An alternative interpretation posits that a chief from the northwest Etla branch of the valley moved his capital to Monte Albán and subsequently unified the valley in the Terminal Formative (200 BC–CE 300).

Located on the main plaza are the famous Danzantes that date to 350–200 BC. This gallery of 300 life-size carved stone monuments depicts slain individuals, probably war captives attesting to the importance of warfare in regional politics and in the founding and growth of the city. At the end of the Late Formative or during the Terminal Formative, a 2 km long defensive wall was built on the northern and western slopes of the city as Monte Albán forcibly extended its control into surrounding regions.

Monte Albán reached its maximum size of 17 000–30 000 people during the Classic period (CE 200–700). Monumental temples and a palace were added to the main plaza, along with stelae depicting Monte Albán's rulers. In contrast to the broad main avenue of Teotihuacan, the main plaza at Monte Albán was designed to restrict access.

As the urban population grew, people created terraces on the hillslopes where they built their houses. Many commoners who lived at Monte Albán were farmers who traveled down the hill to farm their fields. Some craft specialists might have resided together in barrios.

Most construction in the main plaza stopped by c. CE 700, and the city's population shrank. With Monte Albán's decline as a regional political capital, other centers expanded. Small kingdoms, city-states, or cacicazgos, each with a central town or

city, became the dominant political form in the Postclassic (*see Americas, Central: Postclassic Cultures of Mesoamerica*).

### Lowland Maya

Rainforests provided the setting for the development of Maya civilization in southern Mexico, Guatemala, Belize, western Honduras and El Salvador. During the Middle Preclassic (900–300 BC), large chiefdom centers developed in parts of both the Maya lowlands and highlands. The Late Preclassic saw the emergence of the earliest cities in the central lowlands at El Mirador, Nakbe, Cerros, and Tikal, and the establishment of the essential elements of Maya kingship and Great Tradition. El Mirador is the largest-known early city in the lowlands, with two acropoli of temples, palaces, and plazas connected by a causeway and hundreds of residential platforms scattered over 16 km<sup>2</sup>. Toward the end of the Late Preclassic (300 BC–CE 250), El Mirador, Nakbe, and Cerros were mostly or completely abandoned, perhaps due to local overpopulation, conflict, and/or eruption of the Ilopango volcano *c.* CE 250.

Lowland Maya civilization of the Classic period (CE 250–800) consisted of a network of kingdoms cross-cut by a broadly shared elite culture. Some kingdoms grew larger than others through alliances and conquests but none formed a stable regional/territorial state.

Maya centers varied from a few thousand to populations in the tens of thousands, reaching *c.* 60 000 people at Tikal. Maya cities were ritual-regal or courtly centers of royalty and elites. Masonry temples, palaces, ball courts, and the funerary monuments of ancestral rulers were arranged around large open plazas (*Figure 7*). Stone stelae with depictions of rulers, hieroglyphic writing, and dates proclaimed important events in the lives of divine kings. Major plaza groups were separated from each other within a city and connected by causeways. Cities grew by accretion with little indication of overall planning.

Scattered between the plaza complexes were household groups of farmers and craft specialists and lesser nobles. Maya cities were not tightly bounded. Settlement became increasingly dispersed away from the urban core with gardens and fields between house clusters.

Beginning in the ninth century, major cities in the southern lowlands were abandoned, their hinterlands experienced marked population reductions, and kingship collapsed. Cities in the northern lowlands, however, experienced their apogee during the Terminal Classic (CE 800–1000). One view sees the ninth-century abandonment as a pan-lowland collapse.



**Figure 7** Tikal Temple 1.

Others disagree and point to some centers whose occupation continued into the Postclassic. Agricultural degradation from over-intensification, intensified warfare, and elite competition, and a rejection of the institution and ideology of Maya kingship contributed to the collapse of most southern cities.

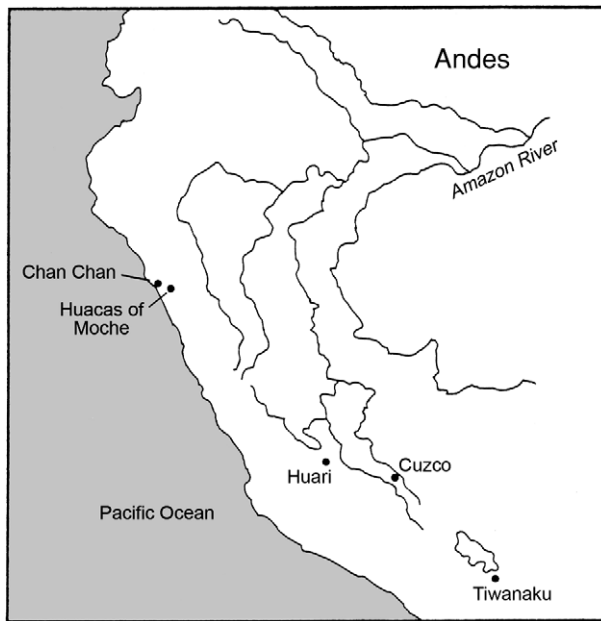
### Andes

The capitals of late prehispanic Andean empires were sizeable cities, with populations in the tens of thousands (*Figure 8*). Researchers have not reached a consensus regarding the antiquity of the first Andean cities and the development of the first centralized state governments. Despite ongoing debate, the Mochica, Wari, and Tiwanaku can be considered to have been early states in their respective regions and provide case studies for exploring urbanism and the rise of civilization. The capitals of these polities bear witness to the transformations concomitant with the establishment of centralized state governments.

### Huacas of Moche

The capital of the Mochica state was located at the mouth of the Moche Valley, at a site comprising the Huaca del Sol, Huaca de la Luna, and the intervening valley bottom. This site, which spanned more than





**Figure 8** Schematic map of the Andes showing locations of early cities.

72 ha and had a population estimated in the thousands, is known today as Huacas of Moche. The principal monuments were laid out so as to capitalize on natural topography while also bounding the area of urban residential population. A major avenue sets the Huaca de la Luna and adjoining elite residences apart from the urban residential area (Figure 9). The two huacas appear to have been used by elites as part of the religious and political activities of the state – other ceremonial activities are known to have been conducted in nearby elite households.

Recent excavations have revealed that the area between the major civic-ceremonial complexes was densely occupied in the Moche IV period (CE 400–700). Researchers have identified multiple domestic compounds that are thought to have been the residences of extended family units. Compounds were enclosed groups of rectangular structures of varying size and construction quality, which contained modest open spaces and storage facilities. These units were separated from each other by narrow streets (generally less than 2 m wide). Excavations have revealed that the occupants of these compounds were generally not a farming population, but were mostly craft specialists – evidence of weaving, ceramic production, shell working, smelting, and the working of lapidary ornaments has been identified, while farming and fishing tools are virtually absent.

The rise of Mochica civilization included the extension of administrative control or hegemony over a



**Figure 9** Urban compounds at Huacas of Moche site.

number of coastal valleys to the north and south of the Moche Valley. In some areas, local settlement patterns were disrupted as secondary administrative sites were established and irrigation systems were extended. The Mochica capital itself seems to have grown and been laid out to meet the new needs of state administration. Monumental building projects increased dramatically at the capital, with elites directing the construction of not only the major huacas, but also palatial residences and elaborate tombs. Specialized craft production also increased at this time, and major agricultural intensification projects were completed as well.

#### Wari and Tiwanaku

The Wari and Tiwanaku polities were the first states to develop in the central Andean highlands and the Titicaca Basin, respectively. Both polities are known to have had urban capitals that developed around the time of the first territorial expansion outside of their core regions. Wari and Tiwanaku secondary centers and provincial outposts were constructed with certain aspects of an urban template in mind, but the populations of secondary sites appear to have been too modest to consider them as cities.

**Tiwanaku** At its maximal extent, Tiwanaku was a city of 6 km<sup>2</sup>, with a population estimated in the tens of thousands. At the center of the city lay a ceremonial precinct that was surrounded by a large artificial moat. Certain of the city's most important monuments are located within the enclosed area (*viz.*, the Kalasasaya and Sunken Temple), as are residential compounds identified as elite and royal palaces. The inner city at Tiwanaku was renovated after CE 800, replacing previous residential areas with a smaller number of compounds occupied by elites with close ties to state ceremonial activity.

Outside of the urban core, archaeologists have excavated domestic compounds interpreted as the residences of minor state officials. These exhibit a degree of central planning and take the form of walled compounds that contained the residences of extended families. Streets and drains separate these compounds and provide access through the site. Some workshops have been identified in the outer part of the city, but the residences of craft specialists have been difficult to identify unambiguously. Agricultural laborers lived mainly in the city's hinterland, near to the system of raised fields that provided sustenance for the population of the Tiwanaku heartland.

**Huari** The Wari state developed in the Ayacucho region of highland Peru. Its capital (Huari) was established on the site of several previously autonomous settlements, growing from c. CE 400–900 and exhibiting the characteristics of an urban center by the seventh century. The urban core of Huari was 4 km<sup>2</sup> at its maximum extent and contained several monumental religious complexes, areas for public feasts, storage facilities, and residential compounds. Walled temple compounds such as the Semisubterranean Temple and the Vegachayoq Moqo complex were laid out and separated by narrow streets, and domestic architecture in later phases takes the form of walled compounds as well. As domestic residential blocks filled in the open areas between religious complexes, the city grew more crowded, and second-story architecture was built. Residential compounds were laid out as walled enclosures in which a series of halls and smaller rectangular structures were built around a central patio area. The excavated assemblage in these compounds has been interpreted as belonging to mid-level state officials.

The first cities in the Andes grew rapidly, outpacing similar growth processes at secondary centers (e.g., Lukurmata, Conchopata). As capitals of early states, these cities grew around precincts of monumental religious architecture in which elite residences have been identified. Open spaces for large-scale gatherings and feasts were built as part of the major religious complexes, and more modest plazas are often found in elite residences. The occupants of these early cities included the ruling elite, minor state

officials, and artisans whose workshops tended to be located outside the main religious-administrative areas. Housing tends to take the form of walled compounds in which extended family groups resided. Residential blocks were separated by streets that appear to have been narrow and opportunistically built, although there is evidence that the state did lay out major avenues and invested in programs of urban renovation resulting in better access and urban infrastructure.

*See also:* **Africa, North:** Egypt, Pre-Pharaonic; **Americas, Central:** Classic Period of Mesoamerica, the Maya; Postclassic Cultures of Mesoamerica; **Americas, South:** Inca Archaeology; **Asia, East:** Chinese Civilization; **Asia, South:** Indus Civilization; **Asia, West:** Achaemenian, Parthian, and Sasanian Persian Civilizations; Mesopotamia, Sumer, and Akkad; **Cities, Ancient, and Daily Life; Classification and Typology.**

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